

The Electronic Journal for English as a Second Language

Effectiveness of an EAP Course on Argument Building for Research Students

November 2021 - Volume 25, Number 3

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Abstract

Notwithstanding the central role played by argumentation in research writing, writing courses on offer to students on the doctoral programmes hardly manifest this significance. To emphasize the role of argumentation in research, this study investigated the effectiveness of an EAP course on argumentation collaboratively taught by two instructors to students enrolled on the doctoral programme in a central university in India. To see the impact of the course on students' argumentation, the data gathered from various writing tasks before, during and after the course were analyzed qualitatively. To understand the overall effectiveness of the course, students' perceptions gathered from the end-of-the-semester questionnaire and teachers' reflections recorded in a dialogic reflective journal were analyzed thematically. Data analysis revealed that explicit instruction of argumentation led to improvement in students' sense of argumentation though such an improvement was not uniform across all the students' written arguments. Both the students' perceptions and the teachers' reflections indicate that various pedagogical decisions made throughout the course contributed to the effectiveness of the course. The findings imply that explicit teaching of argumentation alongside appropriate pedagogical decisions appeared to help these students improve their argumentation.

Keywords: Argument building, English for Academic Purposes, pedagogical decisions, collaborative teaching, dialogic reflection

The Importance of Argumentation in Research Writing

Recent years have seen a renewed interest in enhancing the quality of research output in Indian Higher Education Institutions (HEIs) with a view to finding a place in top 500 global rankings of leading indices. The quality of research output is judged based on the reputation of the journal in which research output appears. One of the important gatekeeping processes journals of high repute

use for acceptance of the paper for publication is the way argumentation is done in the manuscript. This is because argumentation demonstrates 'powers of informed and independent reasoning' (Nesi and Gardner, 2012, p. 36) that enable one to find one's own voice while working with other people's ideas from source texts.

It has been widely acknowledged that argumentation is central to academic contexts in higher education not just in writing courses but even in disciplinary courses as well (Andrews, 2010; Hirvela, 2017; Kibler, 2012; Lee and Deakin, 2016; Nesi and Gardner, 2012). Despite the importance of argumentation, many research scholars in India across disciplines find it hard to cope with argumentation as they seem to have little exposure to the argumentation in their previous years of study. It is assumed that students come to HEIs either fully equipped with argumentation skills or acquire them implicitly on their own through 'the pedagogy of osmosis' during the course of their study (Nesi and Gardner, 2012, p. 3). A similar view is maintained in Lea and Street (1999) as experienced writers believe 'expectations for student writing' are 'common sense rather than teachable writing practices' (as cited in Kibler and Hardigree, 2017, p. 77). Writing Courses offered by English teachers do not seem to go beyond general language aspects. Disciplinary teachers with their tacit understanding of argumentation not only fail to explicate the notion of argumentation succinctly but provide comments on student writing in a manner that leave students puzzled as to what they are supposed to do with the feedback they receive. This condition points to the need for explicating the concept of argumentation and, even more importantly, its explicit teaching in the context of L2 English for academic purposes (EAP).

Surprisingly, despite its recognized importance in higher education, argumentation in research writing in L2 contexts has received far less attention than it richly deserves. This situation impels drawing from the L1 argumentation scholarship to gain deeper insights into the concept of argumentation (Hirvela, 2017). It is useful to consider Hirvela's observation of the distinction between *learning to argue* and *arguing to learn* in the L1 argumentation literature to understand the notion of argumentation in L2 contexts as well.

Learning to argue views argumentation as reasoning where students learn to present a position/claim after analyzing and evaluating ideas from source texts, and to logically support the position/claim thus made with relevant evidence drawn from the same source texts, and to coherently establish a link between the evidence used and the claims made. Hence, the purpose of argumentation in this view is to convince and persuade the audience with 'the logic underlying the ways in which its claims are supported and explained' (Hirvela, 2017, p. 71).

Arguing to learn, on the other hand, views argumentation as inquiry where students learn to use the elements of argumentation as a means to develop deeper 'understanding of a topic and thinking skills' (Hirvela, 2017, p. 71). The purpose of argumentation in this view is 'not to teach how to construct arguments' (Hirvela, 2017, p. 71), but to enable them to use the elements of argument as tools for their critical engagement with text. It becomes obvious that the learning to argue perspective is a prerequisite for arguing to learn perspective to be in operation. In the present study, both views of argumentation were exposed to the students.

Since the idea of argumentation is abstract and not visible to the naked eye, it sounds rather 'unrealistic to expect all or even the majority of students' (Nesi and Gardner, 2012, p. 261) to acquire the ability to process and produce arguments in writing through the process of osmosis rather than explicit instruction. 'Unfocussed exposure to unorganized' (Thornbury, 1999, p. 50)

content in the source texts may at best leave readers with tacit knowledge of argumentation, which, when not articulated properly at the time of providing feedback on student writing, makes students confused and frustrated. Recognizing this gap, the present study made a modest attempt to evaluate the effectiveness of an EAP course on argument building for research students and its impact on their performance in developing arguments. This study was also a modest response to Hirvela's call for classroom-based research on L2 argumentative writing in HEIs. This study had the following objectives:

- To evaluate the effectiveness of an EAP course on argument building for research scholars and
- To assess the impact of the course on the students' performance in building arguments.

The study assumes significance as it establishes the value of explicit instruction of argumentation in higher education going beyond surface features of language and style.

Literature review

Over the past four decades, much of published EAP writing research has focused on different sections of research articles (see for example Kanoksilapatham, 2007; Swales, 1990, 2004) corrective feedback (Ferris, 2002; Hyland & Hyland, 2006), metadiscourse (Hyland, 2005), source use (Pecorari and Shaw, 2013; Polio and Shi, 2012) and plagiarism (Pecorari, 2013), to name just a few. Though the findings of these studies have made substantial contribution to both academic writing research and pedagogy, ESL students in universities do not seem to have any support system that enables them to approach academic writing without trepidation. This is possibly due to scant attention paid to argumentation, the important role of which, as Hirvela (2017) indicates, has been recognized, but 'marginalized as a major topic of investigation' (p.70). Argument building in academic writing requires students to critically engage with the ideas from source texts for making claims and bringing relevant evidence to support them, and to establish a link between the evidence so used and the claims made. Such an engagement is made possible by consciousnessraising tasks that draw students' attention to both the macrostructure of argumentation and the lexico-grammatical choices deployed for making meanings in the text. To develop such an awareness and thereby scaffold learners to gain confidence in dealing with argumentation both in reading and writing, it becomes important to design an EAP course on argumentation in academic writing instruction.

There is no consensus on the way the term 'argumentation' is understood in L2 literature. While some (Bacha, 2010; Crammond, 1998; Davies, 2008; Mitchell and Andrews, 2000; Wingate, 2012) view it as the ability to persuade the reader to adopt the writer's position with the choreography of well-supported claims 'effectively grounded in source-based evidence' (Pessoa, et.al., 2018, p. 82), others (Jonassen and Kim, 2010; Kuhn, 1991, 2005; Ravenscroft, et.al., 2006) perceive it as a means to develop 'deeper understanding of a topic or a situation through an analytic process' (Hirvela 2017, p. 71). As discussed in the previous section, the former view relates to learning to argue while the latter view relates to arguing to learn. An important point to be noted from the two views is that both views consider the purpose of the argument as their point of departure rather than the structure of the argument. For both views, however, it is the structure that is at the core of the argument which in turn can serve any of the purposes mentioned in either view or both. The structure essentially includes claim (initially stated conclusion), data (facts supporting the claim), warrant (connections established between the data and the claim), backing (support/explanation

for the warrant), *qualifier* (tempering strength of the claim), and *rebuttal* (response to counterclaims) as elements of good argumentation (Andrews, 2010). Therefore, it is logical to teach learning to argue and then - building on the knowledge and skills acquired through this approach – to show how argumentation can be deployed as a means to deepening learning and thinking.

Research shows that lack of consensus on the term argumentation seems to have further added to the skewed understanding of the concept by academics and students. Mitchell et al. (2008) found that both students and tutors demonstrated a skewed sense of argumentation. Riddle (2000) observed that academics had difficulty in distinguishing analysis from evaluation. Lea and Street (1998) maintained that tutors were hardly able to articulate what constitutes a well-developed argument. Studies by Davies (2008), Lea and Street (2000), Mitchell and Riddle (2000), Salter-Dvorak (2016) highlight the challenge the academics face when asked to articulate their sense of good academic writing despite their tacit knowledge. Wingate (2012) concludes that such conceptual uncertainty about argumentation 'leads to unhelpful advice and inadequate teaching of argumentation' (p.147).

It has long been suggested that argumentation be made the 'focus of deliberate educational practices' (Davies, 2008, p. 327) with a view to making explicit the choreography underlying argumentation. Though there are divergent views as to whether disciplinary teachers should teach argumentation or EAP teachers should do it (Bacha, 2010; Davies, 2008; Nesi and Gardner, 2012; Wingate, 2012), there is an increasing trend for interdisciplinary collaboration between EAP and disciplinary teachers (see for example Cargill, M., and O'Connor, P. 2009; Conrad, S., et.al., 2016; Robinson, et.al., 2008). Such collaboration is exhorted in Andrews (2010). While some believe that argumentation involves generic skills and are therefore transferable through explicit instruction by EAP instructors, others maintain that it is discipline specific as knowledge and argument are constructed within disciplines. Bacha (2010) and Davies (2008) argue that argumentation is a generic skill and can be taught to academics explicitly so that tacit understanding acquired by them through immersion and acculturation becomes explicit, which will enable them to offer clear and critical feedback on student writing. Wingate (2012), however, believes that argumentation is grounded in disciplinary writing and therefore it is important to go beyond addressing surface features to include three components in the instruction of argumentation: '(1) the analysis and evaluation of content knowledge, (2) the writer's development of a position, and (3) the presentation of that position in a coherent manner' (p. 146). She further points out that academic tutors' feedback on student writing tends to be obscured through vague language 'such as the imperative 'Argument!' written in the margins of student essays' (p. 145) due to their inadequate sense of argumentation as opposed to the way it is conceptualized in disciplines.

Central to explicit instruction is the use of various pedagogical models/approaches. Some of the pedagogical models used by various studies include four-staged procedures of the overall text organization (Mitchell and Riddle, 2000), a five-step learning cycle with organizational plans (Bacha, 2010), a six-step procedure for teaching argumentation (Davies, 2008) and the read-analyse-write approach to genre-based instruction (Robinson, et.al., 2008). The pedagogical approach used in Robinson, et.al., (2008) has been proved suitable for understanding and teaching discipline-specific genres as the materials developed through interdisciplinary collaboration over

a period of five years were 'reviewed and approved by 30 chemistry faculty from multiple US institutions' (Stoller and Robinson, 2013, p. 46).

The read-analyse-write approach to genre-based instruction fosters discipline-specific writing skills in students by enabling them to 'read (and reread) authentic texts from the target genre, engage in scaffolded genre-analysis activities, and then write (and rewrite) their own work' (Stoller and Robinson, 2013, p. 46) in line with disciplinary conventions. This approach is premised on the belief that students develop their discipline-specific writing skills if they are made to read and analyse the works of others in their fields of study as seems to be the case with many effective writers in different disciplines. To effect this development, students will be made to identify and examine genre components such as audience and purpose, organization, writing conventions, grammar and mechanics and disciplinary content. Through read-analyze-write sequence tasks and explicit instruction, it is believed that 'students develop skills that they can apply well beyond' the courses they have attended thus leading to their independent learning for life (Stoller and Robinson, 2014, p. 278).

Methods

The study was carried out with doctoral students (n=21) drawn from four soft science disciplines - Management studies, Anthropology, Political Science and Applied Linguistics - at a central university in India. The students were at different points of progress on their doctoral programmes. These students were offered a semester-long four-credit EAP course on argumentation for 50 hours. Data collected before, during and after the course were analysed qualitatively to account for the *effect* and *effectiveness* of the course. In this study, *effect* and *effectiveness* are operationalized as follows: while *effect* refers to the impact of the course on the students' performance, *effectiveness* refers to the overall impact of all the pedagogical decisions made during all the phases of the course design.

To understand the *effect* of the course, a pre-test was conducted to determine the students' entry level awareness of argumentation followed by an intervention on argument building in academic writing. The intervention included instruction informed by 'read-analyse-write' approach to genre-based instruction (Robinson, et.al., 2008). After instruction, a post-test in the form of an end-semester examination was conducted to assess the effect of instruction on the students' argument building skills in academic writing.

To understand the *effectiveness* of the course, data were collected from two standpoints: students' perceptions and teachers' reflections. To obtain students' perceptions, a questionnaire was administered at the end of the course. It included questions on the relevance of the materials, usefulness of the method, and the impact of the course on their argument building in research writing. To obtain teachers' reflections, a dialogic reflective account – *the reflection that occurs through critical discussion teachers engage in before and after each session of instruction on the classroom tasks students worked on and pedagogical decisions the instructors made* - was maintained to account for the pedagogical decisions made throughout the instruction.

Ethical clearance was obtained from Institutional Ethics Committee of the university in which the study was carried out and informed consent was obtained from all the participants.

Data Collection

As can be seen from Figure 1 below, the EAP course offered as part of the present study was preceded by a preparatory stage which included needs analysis and preliminary work related to course design.

Preparatory	Needs Analysis	Questionnaire		
stage		Semi structured interview	ctured interview	
Preliminary work related to Course Design				
		Pre-test	- A	
Intervention	EAP Course	Classroom Tasks	gic	
	Instruction (50 hrs)	Post-test	ialo	
		End-of-the-semester	Dig	
		questionnaire		

Figure 1. Depiction of the Stages and the Research Tools Used in the Study.

Preparatory stage.

i. Needs analysis

A Needs analysis was carried out to understand the target learners' needs on argumentation in writing. A questionnaire was administered online through Google forms to about 100 doctoral students across the country to understand their awareness of argumentation in research writing. Following this, semi-structured interviews were conducted with five disciplinary teachers across soft sciences. The findings of the questionnaire and the interview were incorporated into the course design and materials used in the course. Additionally, the findings of the pretest were also considered while designing the course. Preliminary work related to course design entailed preparing the course outline, sorting pooled materials together in line with the course outline prepared and adapting read-analyse-write approach to genre-based instruction from Robinson, et al., (2008).

ii. Description of the EAP course

As can be seen from Table 1, the course was structured around four modules - Basics of Academic Writing, Critical Reading for Argumentation, Developing Arguments and Argumentation across different sections of research report - spread across 50 hours of instruction as a semester-long credit-bearing course. The pedagogical model used for this instruction was the read-analyse-write approach to genre-based instruction. The instruction in the face-to-face classroom interspersed with tasks that raised students' awareness of argumentation was complemented by Google classroom tasks that aimed at providing students with opportunities to practise argumentation and give peer feedback on each other's writing at their own pace and time. Further, for the benefit of instant communication, WhatsApp messenger was also used in the study. The use of blended learning tools along with face-to-face instruction was done with ease as the course was taught by two instructors collaboratively.

Table 1. EAP Course Design.

No	Modules	No of hrs.	Topics covered	Pedagogical approach
1	Basics of Academic Writing	10	Rhetorical functions, Moving from Description to Analysis to argument, information flow	to
2	Critical Reading for Argumentation	10	Steps in critical reading, Synthesis grid	proach
3	Developing Arguments	15	Identifying patterns, making claims, integrating evidences – source use strategies	e Write approach
4	Argumentation across different sections of research report	15	Introduction, Literature Review, Methods, Results and Discussion	Read Analyze Write app Genre-based instruction

Though materials and tasks were pooled together at the preparatory stage, they underwent different iterations of revision through negotiation during the dialogic reflection before they were taken to the class. The tasks were designed to raise the students' awareness of argumentation by engaging them in reading the text and analyzing its move structure. At this stage, the instructors went around to provide necessary support to the students. After reinforcing their awareness of genre and its move structure and the process of its construction through peer collaboration activities and teacher scaffolding, they were made to write their own text on which peer feedback and the instructors' comments were given both in class and on Google classroom.

Data collection tools. The course thus designed in the preparatory stage was offered to target students over a semester. The following tools were employed while collecting data before, during and after the instruction. While the data collected from a pre-test, class tasks, and a post-test were used to assess the effect of the course on student argumentation, the data from the end-of-the-semester questionnaire and dialogic reflective account were used to evaluate the effectiveness of the course.

i. Pre-test

The pre-test was conducted to understand the students' entry level awareness of argumentation in research writing. The test included four tasks covering the following areas:

- Identifying the nature of evidence in an argument
- Identifying the tone in the text and assessing reliability and validity of the sources
- Identifying the argument
- Understanding and evaluating sources, developing a position statement from multiple sources and building the argument.

ii. Classroom tasks

Since the task design was theoretically informed by read-analyse-write approach to genre-based instruction, all tasks used in face-to-face and Google classroom were designed in such a way that they draw students' conscious attention to genres related to research writing by engaging them in the three stages of read-analyse-write approach underpinned by the socio-cultural theory of mind. In line with this approach, the tasks designed engaged students in peer interaction while working on the tasks in pairs or groups and also while giving feedback to one another.

iii. Post-test

The post-test was conducted to assess the impact of the course on the argumentation of the students. The test included three tasks covering the following areas:

- Reading and understanding multiple source texts, creating synthesis grid and observing
 patterns, turning the patterns into claims, evaluating ideas from multiple sources and
 integrating relevant ideas as evidence to support the claims and finally building a coherent
 argument.
- Choosing relevant findings as evidence to support the hypothesis of the study and building the argument in the discussion section of a research report.
- Identifying the focus of each text based on the information flow and justifying the choice.

The data collected from these tools were used to assess the impact of the course on student argumentation.

iv. End-of-the-semester questionnaire

At the end of the course, this questionnaire was administered to elicit the students' perceptions on the effectiveness of the course. It included 20 questions in all, of which 16 were closed-ended and four open-ended. These questions cover the areas which include different aspects of the content of the course, pedagogical practices, experience of using blended learning tools, and the accessibility and approachability of teachers.

v. Dialogic Reflective Account

The decision to teach the course collaboratively entailed the instructors engaging in making several pedagogical decisions collectively. We found dialogic reflection to be appropriate not only to account for various decisions made on the course but also to minimize the researcher bias as it provides scope for a critical dialogue for the instructors to review the decisions and resolve conflicts through negotiation. Our reflection revolved around the decisions related to the choice of materials, classroom instruction, time management, and pedagogical approach. The decisions made before, during and after instruction were reflected upon by the instructors soon after each session and a total of 25 entries were recorded in Google Keep - an online note making tool.

Data Analysis

Data collected from the tools were analyzed qualitatively to account for effect and effectiveness of the course as outlined in the table below (Table 2).

Table 2. Data Analysis Procedure with the Objectives of the Study.

Data	Source	Instrument	Analysis	Objective
Student writing	Pre-test, Classroom Tasks, Post-test	Pre-test, Classroom Tasks, Post-test	Qualitative analysis using Analytic Rubrics	Effect
Perceptions	Students	Questionnaire	Thematic Analysis	
Reflections	Instructors	Dialogic Reflective Account	Thematic Analysis	Effectiveness

While student writing collected at different stages of the course was analyzed qualitatively to understand the effect of the course on students' awareness of argumentation, students' perceptions and instructors' dialogic reflections were subjected to thematic analysis to account for the overall effectiveness of the course.

Student writing from pre-test, classroom tasks and post-test was qualitatively assessed using analytic rubrics developed based on the objectives of each task. The rubrics-based assessment was carried out individually by both the instructors and the differences were resolved through negotiation resulting in a final assessment recorded in a grid. Analytic rubrics used for qualitative assessment are given in the table below (Table 3).

Table 3. Analytic Rubrics Used for Qualitative Assessment.

	Q1	Q2	Q3	Q4
	Identifying type of		Identifying	a. Critical reading of
Pre-test	evidence and	position of the	argument and	sources
	giving reasons	author	giving reasons	b. Developing a
		b. evaluating the	why it is so.	position
		reliability and		c. Synthesizing
		validity of		evidence
		sources		d. Building
				argument
Classroom	Claim	Evidence	Warrant	Comment
Task				
	Argument	Discussion	Information	Comment
	a. Critical reading	a. Move structure	flow	
Post-Test	of sources	b. Elements of	a. Identifying the	
	b. Developing a	argument	differences in	
	position		information	
	c. Synthesizing		flow	
	evidence		b. Justification	
	d. Building			
	argument			

As part of thematic analysis, the data obtained on the open-ended questions were scrutinized first individually based on the criteria followed for questionnaire design. Then, upon consensus three

major patterns were identified. Subsequently, data from the closed-ended questions were thoroughly examined and mapped on to the three patterns identified in the responses to open-ended questions.

Similarly, the entries in the dialogic reflective account were summarized by each researcher individually focusing on pedagogical decisions taken throughout the course. These summaries were exchanged and examined by each researcher to check for any discrepancies. Finally, a consolidated summary was prepared collaboratively through a discussion. A close examination of this summary revealed three major themes that contribute to the effectiveness of the course.

Findings and Discussion

In this section, we present and discuss the findings with respect to the objectives of the study.

Though the broader objective of the study is understanding the effectiveness of the course as it is operationally defined to subsume effect, it is appropriate to discuss the findings relating to understanding the effect of the course before discussing the overall effectiveness of the course.

Effect of an EAP Course on Argument Building for Research Scholars

To understand the impact of the course on the students' performance in building arguments, evidence was drawn from three research instruments: pre-test, class tasks, and post-test.

Students' awareness of argumentation before the course. The following are the major findings drawn from the analysis of student writing in the pre-test.

- While most of the students (12) were unable to identify the type of evidence in the argument, some (6) could identify the evidence type but failed to justify their choice. Only a few (3) were able to do both.
- About one half of the students were neither able to identify the position of the author in the argument nor evaluate the validity and reliability of sources. However, a few of them (3) could do both to a great extent.
- Though the majority of the students (17) were able to identify the argument, they were hardly able to reason why it qualifies to be an argument.
- Though most of the students (16) understood the ideas from the source texts, some of them (7) failed to impose their own order on the ideas drawn from the source texts to demonstrate their perspective and develop the argument.
- Though all the source texts are the same for all the participants, some of them (6), while developing argument, reflected their disciplinary culture by choosing the evidence reflective of their discipline. For example, a student of political science looked at the source texts from the viewpoint of governance, a student of management viewed them through the prism of finance and commerce while a student of anthropology looked at them from the perspective of ontology.

These findings show that students have an ill-informed understanding of argumentation possibly due to the absence of explicit instruction on argumentation and the assumption that argumentation is acquired implicitly through exposure. Similar observations were made in Andrews (2010), Nesi and Gardner (2012), Wingate (2012).

Students' awareness of argumentation during the course. Several tasks students worked on in face-to-face and Google classroom reflected their growing sense of argument. For example, in one of the face-to-face classroom tasks, students were provided with a synthesis grid and were asked to develop an argument using the data from the grid. Despite language errors, the students showed progress in terms of organizing argument around claim, evidence and warrant. Though some students (5) simply repeated the task prompt as the claim, others were able to make their own claims. While many of them (14) struggled to identify similarities and differences between the sets of data in the grid so as to present them as evidence in support of their claims, a few (3) could do it fairly well. It was found that a good number of students (14), while being able to make connections between the data sets in the grid, still had difficulty in putting this down in writing as a coherent text. The difference in students' ability to make connections between the ideas and their ability to put it down as a coherent argument can be traced back to their differing points of progress in their PhD programs as well as the degree of engagement with their disciplinary literature. A similar finding was observed in Stoller and Robinson (2018).

This progress can also be seen in their comments on each other's work as part of peer feedback in Google classroom. For many tasks in Google classroom, students were divided into pairs and provided with clear instructions to give feedback on each other's work. Engaging students in a series of well-planned peer feedback activities enabled them to look at each other's arguments critically. This was reflected in the whole class discussion (in face-to-face classroom) on the first drafts of their arguments where students were made to provide peer feedback on each other's work. Following this, students shared their critical reflections of their own practices in argumentation.

Students' awareness of argumentation at the end of the course. While the effect of the course on all the students was clearly evident on critical reading, its effect was rather scattered on writing arguments. Most of the students (15) demonstrated their critical reading ability through their synthesis grid which captured their big picture of the source texts. Students' critical engagement with the source texts was found to aid their identification of patterns in the synthesis grid. The comments written by some students (5) in their synthesis grid reflected their growing sense of criticality evidenced through the kind of questions they raised on various aspects of the source texts. For example, some students (3) questioned the reliability of the sources, validity of the methods used, authenticity of the findings, grounds for implications etc. Besides this, a few (2) students cross-referenced source texts across the grid indicating similarities and differences between ideas in different texts.

Though the students showed improvement in their argument writing, it was not uniform across all students. The effect of the course was clearly visible on student argumentation in that their writing included the core elements of argumentation. However, it was found that there was a difference in the quality of argumentation. While some students (7) had difficulty in turning the patterns observed in the synthesis grid into claims, others (8) found it challenging to integrate the evidence drawn from multiple source texts. Many students (15) included claims and evidence with tenuous connections between them whereas a few (4) attempted to establish links between claims and evidence. Despite having been made aware of the flow of information during the course, many students (10) failed to reflect this awareness when piecing together those ideas in their writing. Not surprisingly, a few students (3) - who performed well throughout the course right from the pre-test - performed exceedingly well in the post-test as well.

From these findings it can be concluded that explicit instruction contributes to the growing awareness of argumentation among students and is likely to have its impact on the writing of argument as well if such practices are incorporated into curriculum.

Effectiveness of an EAP Course on Argument Building for Research Scholars

To understand the overall effectiveness of the course, evidence was drawn from the analysis of students' perceptions obtained from the end-of-the-course questionnaire and teachers' reflections from the dialogic reflective account.

Students' perceptions. Our analysis of the students' responses to the questionnaire revealed the following themes: heightened awareness of argumentation, relevance and usefulness of the course, and value of peer interaction.

i. Heightened awareness of argumentation

All the students expressed that the course raised their consciousness of argumentation. Their sense of argumentation was found to include the core elements of argumentation, the processes involved in producing the argument such as critical reading, creating synthesis grid, and finding the author's voice. This sense of argumentation can be evidenced through some of the student's responses presented below:

'My reading quality has improved. After the course, I am able to look at articles critically. Regarding writing, I have started to pay more attention to the language I use., whether it is conveying the same meaning that I have in mind.' [S05, Q20]

'The difference I am able to observe is I became more conscious, and reflect back from different aspects of the course.' [S07, Q20]

'Now, I have started to see any writing critically. I see whether the author is present in text or merely saying the rhetoric.' [S13, Q20]

'I have started to read each text with great observation looking for the key arguments and author's voice. Also, while writing I see that I state my arguments strongly with logical consistency.' [S17, O20]

A close examination of these responses revealed that students improved their sense of argumentation in terms of critical understanding of the text and that they started to apply this awareness in their writing. A similar trend was observed in the post-test results reported in the previous section. This view is further corroborated with their responses to the closed-ended questions related to awareness of argumentation.

ii. Relevance and usefulness of the course

Students' responses to the questions related to the tasks and materials used throughout the course indicate that all of them found the contents of the course relevant and delivery of the course effective. This was expressed by students in their responses to the open-ended questions in the questionnaire.

'The hands- on tasks, the process of identifying arguments and building arguments, creation of patterns and the whole concept of writing better were the most important aspects that were most useful as well as valuable lessons for life. In addition, the instant and constant support from the Course Coordinator and the Research Scholar enriched the learning experience.' [S12, Q19]

'Most of the sections were very relevant. Thanks to this course I know what academic writing means and how to go about it. Classroom discussions, clarifications, working in pairs gave us clarity.' [S10, Q19]

Especially, the creation of a synthesis grid was found to be very helpful as a preparatory task for building arguments. Though some of them found it challenging to handle multiple source texts at the beginning, as can be seen from their responses, they learned to work with ideas gathered from various sources with the help of the synthesis grid. The following student responses illustrate this point succinctly.

'The task of the synthesis grid helped a great deal in refining the thought process as well as the writing style. It helped a great deal in developing better conceptual clarity, which in turn, helped in observing patterns systematically and translating them into claims. Building arguments became easy with the exercise of synthesis grid.' [S11, Q09]

'Initially I felt difficult to do the synthesis grid but later I found it really helpful for writing my write-up.' [S03, Q09]

Furthermore, all the students rated the course highly in terms of its quality, accessibility, usefulness and engagement in closed-ended questions. In addition to this, most of the students found the use of Google classroom alongside face-to-face classroom useful as it afforded the opportunity to work at their own pace and time.

iii. Value of peer interaction

The responses of students on peer interaction reassured our beliefs in the value of peer collaboration in learning and teaching. As can be seen from the examples given below, peer collaboration carried out during classroom tasks and feedback sessions made the students realize the potential and value of peer interaction in gaining better perspectives on their writing.

'The peer interaction served as a mirror to my task. I could develop a perspective based on my peer's work. This further helped me in refining my work. In addition, the peer review helped me in understanding how my task appeared to a reader, which helped me gain insights into writing better.' [S17, Q18]

'Peer interaction helped me to know my mistakes and also get an idea about how to write well and learned how I could sequence and write in an organized manner.' [S12, Q18]

Interestingly, in this course, contrary to popular belief, almost all students valued and looked forward to peer interactions as much as interaction with instructors. However, one student's comment on this aspect was rather an exception.

'I didn't find peer interaction insightful for me. The ideas and suggestions by sir were quite helpful for me, which helps me to remold my draft.' [S05, Q18]

It was encouraging to note that the students found the course relevant and useful, valued peer interaction and approached arguments with growing confidence. We believe that the effectiveness of the course is possibly a result of various pedagogical decisions collaboratively made to address the needs identified through needs analysis.

Teachers' reflections. A detailed analysis of the dialogic reflective account enabled us to identify the following major themes from the pedagogical decisions made, which enhanced the effectiveness of the course: collaborative teaching, blended learning and read-analyse-write approach.

i. Collaborative Teaching

The choice of collaborative teaching as one of the major pedagogical decisions was made with a view to enhancing the quality of instruction. Even before the starting of the course, many decisions were made collaboratively from the needs analysis stage through to the course design and materials development. Materials were carefully chosen and tasks were scrupulously designed so as to meet the needs of the students and match the disciplinary variations. Our commitment to get the most authentic and appropriate texts to the classroom in order to match the students' disciplinary variations can be evidenced through an instance - recorded in our dialogic reflective entry of session 14 - in which we invested considerable time to look for a research paper that suited all students' disciplinary backgrounds for a task that drew their conscious attention to steps involved in critical reading.

The participants were given hands-on experience of reading a research paper critically through a recent paper taken from JEAP. Considerable time was spent on choosing this paper as we wanted it to appeal to all the participants. Each one of us went through several papers from the various journals of all the four disciplines and tried to find a paper that appeals to everyone in the class. Both of us brought two relevant papers to the table and selected the most relevant paper through a discussion.

(Excerpt from dialogic reflective journal entry of session 14)

Our decision to conduct classes together brought a huge change in classroom dynamics as students had access to two instructors at a time for any clarification to seek as can be evidenced in the excerpt below:

Those students who were absent for the last class were attended to by the other teacher to help them cope with the task given in the class. This teacher sat with them and made them work out the mapping for each text.

While all the students were working in pairs, we went around and interacted with some of the pairs and clarified their doubts.

(Excerpt from dialogic reflective journal entry of session 11)

Such an affordance available in the classroom was viewed by students as a refreshingly welcome change for them. As a result, they brought more seriousness to the activities conducted in the class. Almost all entries recorded in the dialogic reflective account attest to the fact that students had a strong scaffolding mechanism that attended to their concerns and anxieties while working in pairs and groups on different tasks. This view is echoed strongly in their responses to closed-ended questions about the accessibility and approachability of the instructors both in and outside the class. The presence of two instructors in the class gave scope for addressing various issues arising from the heterogeneous nature of the classroom.

ii. Blended Learning

The choice of using Google classroom and WhatsApp as blended learning tools was a conscious pedagogical decision to complement the face-to-face instruction. Blended learning tools enabled students to work on writing tasks at their own time and pace because they allowed them to interact with other peers and instructors and access relevant materials and help from any online source. The following excerpt illustrates the affordance provided by the blended learning tools:

To complement the discussion happened in the classroom, a task was set via WhatsApp to be worked out for the next class. This task aims at making the participants see the anatomy and

physiology of each text so that they can clearly identify whether the text is descriptive/analytical/summarized/argumentative.

(Excerpt from dialogic reflective journal entry of session 7)

Engaging students in peer feedback on Google classroom tasks was found to be highly productive as students themselves were empowered to be the resource persons for providing feedback, which was also attested to in our dialogic reflective journal entries as can be seen in the excerpt below:

To reinforce this learning, we designed a task and posted it in the Google classroom for them to work and share with the peers for feedback during the weekend. We also spoke to them informally about the paper posted for their reading and the task set.

(Excerpt from dialogic reflective journal entry of session 10)

Similarly, a good deal of time was invested in designing blended learning tasks, rubrics for peer feedback, and instructions for peer interaction both on Google classroom and WhatsApp. This finding gains strength as the students responses also indicate the same phenomenon in the end-of-the-course questionnaire.

iii. Read-Analyse-Write Approach to genre-based instruction

The decision to adapt the read-analyse-write approach to genre-based instruction was made to account for authentic communication that takes place among scholars about their disciplinary research. This approach was found to work well with students as it raised their awareness of argumentation in terms of the move structure of various research genres and the language associated with them through iterative reading, analysing and writing procedure. This finding garners evidence from multiple instances of our dialogic reflection. The following excerpt illustrates how the pedagogical approach used in the study helped the students find their voice while building their arguments in research writing.

Some examples of analysis and synthesis were given and discussed. The participants were made to distinguish between a text that has simply put together two pieces of evidence without the author's voice and a text that included all these aspects. After they were made to understand how the author's voice is built into the text through synthesis, the process involved in integrating evidence into the argument was demonstrated to them through an example. Then, a sample synthesis grid was presented to them. Following this, they were asked to observe patterns in the synthesis grid and write an argument using evidences from the synthesis grid.

(Excerpt from dialogic reflective journal entry of session 15)

This finding draws further support from students' responses to the questions related to the instructional approach on the end-of-the-course questionnaire and the students' comments on several episodes of informal communication both during and after the course.

Conclusion

This study explored the effectiveness of an EAP course on argumentation in second language context and found that explicit instruction of argumentation led to improvement in students' sense of argumentation though such an improvement was not uniform across all students in their written arguments. It appears that continuing to use the awareness gained through this course in terms of critical reading of argumentation and turning this critical understanding of argumentation into writing arguments is most likely to help students become recognized members of the discourse of disciplinary communities. This kind of active and conscious engagement with argumentation

needs to be fostered in Indian HEIs in order to improve the quality of research output. Such engagement can help learners to become not only as discerning consumers but also as active contributors of knowledge construction.

Pedagogical practices followed in this study such as collaborative teaching, dialogic reflection, using blended learning tools, and scaffolded peer interaction can be used in other contexts as well to achieve desired learning outcomes. This study points to the need for writing teachers and disciplinary teachers to incorporate argumentation in their courses so as to enable students to approach argumentation with a greater degree of confidence. Though the collaboration in this study happened to be between writing teachers, future studies can explore possibilities for collaboration between writing teachers and disciplinary teachers to achieve a 'balance between generic skills and discipline-specific skills' (Andrews, 2010, p. 89) resulting in narrow-angled EAP courses. The study was limited by time and therefore had to adapt materials from other sources. It is recommended that studies of longer duration be funded and encouraged to produce rigorously vetted quality materials to suit the specific needs of L2 writing contexts.

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Acknowledgements

The research reported in this paper was funded by the British Council under English Language Teaching Research Mentoring Scheme (ELTRMS) bearing contract number IND/CONT/GA/18-19/63 granted to the first author.

To cite this article

Appa Swami, J. & Akram, SK. (2021). Effectiveness of an EAP course on argument building for research students. *Teaching English as a Second Language Electronic Journal (TESL-EJ)*, 25(3). https://tesl-ej.org/pdf/ej99/a10.pdf

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